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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Elizabeth Sisley

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EXAMINER

DAY, HERNG DER

ART UNIT

PAPER NUMBER

2128

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/688,006	Applicant(s) SISLEY, ELIZABETH	
	Examiner HERNG-DER DAY	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to Applicant's RCE and Amendment and Response ("Amendment") to Office Action dated July 9, 2008, mailed January 9, 2009, and received by PTO January 27, 2009.

1-1. Claims 1 and 9 have been amended. Claims 1-3, 5-11, and 13-16 are pending.

1-2. Claims 1-3, 5-11, and 13-16 have been examined and rejected.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings on the file is informal. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

3. The amendment filed January 27, 2009, is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. As stated in the MPEP § 706.03(o), "New matter includes not only the addition of wholly unsupported subject matter, but may also include adding specific percentages or compounds after a broader original disclosure, or even *the*

Art Unit: 2128

omission of a step from a method. See MPEP § 608.04 to § 608.04(c). See *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976) and MPEP § 2163.05 for guidance in determining whether the addition of specific percentages or compounds after a broader original disclosure constitutes new matter.” The introduced material which is not supported by the original disclosure is as follows: The amendment to remove the “Timing” row in Table 6 at page 21 of the specification as shown at page 3 of the Amendment filed January 27, 2009.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

4. Claim 9 is objected to because of the following informalities. Appropriate correction is required.

4-1. Claim 9 recites the limitation, “allocating the defined set of components to computer hardware resources *having the computing resources having the computing resources* according to the modularity and the coupling strength” at the end of the claim. It appears that “having the computing resources having the computing resources”, should be “having the computing resources”.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-3, 5-11, and 13-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

6-1. Claim 1 recites the limitation, “determining a *coupling strength* for each coupling in the set of couplings” in line 16 of the claim. Claim 9 also recites the same limitation. However, as recited in claims 5-7 and 13-15, a “timing strength” is used to determine the *coupling strength*. The amendment to remove the “Timing” row in Table 6 at page 21 of the specification does not appear to have support in the original disclosure. Specifically, Applicant has argued at page 9, paragraph 4, of the amendment filed on November 30, 2005, “Applicant respectfully submits that the timing strength calculation is adequately described in the specification. As noted on page 21, the various endpoints at the extremes are assigned strengths of 1-10. Thus according to table 6, when the timing is at or near the minimum endpoint, the timing strength is 10. When the timing is at or near the maximum endpoint, the timing strength is 1. Thus Table 6, when read in conjunction with the specification, adequately describes and *enables* pending claims 5-7 and 13-15.” In other words, Applicant specifically asserts, “Table 6, when read in conjunction with the specification, adequately describes and enables pending claims 5-7 and 13-15”. Therefore, removing the “Timing” row in Table 6 would removing the determination of *timing strength*, disable the determination of *coupling strength*, and make the claims containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled

in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Dependent claims are rejected as being dependent on a rejected claim.

7. Claims 1-3, 5-11, and 13-16 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for preallocating tasks in each coupling in the set of couplings to a specific processor, does not reasonably provide enablement for preallocating tasks in each coupling in the set of couplings to memory resources or communications resources. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

7-1. Claim 1 recites the limitation, “preallocating tasks in each coupling in the set of couplings to one of the plurality of computing resources” in lines 10-11 of the claim and the newly added limitation, “the computing resources including at least one of processor resources, *memory resources* and *communications resources*” in lines 4-5 of the claim. Claim 9 also recites the same limitations. However, as described in the specification in lines 14-17 of page 18, “Positive pre-allocation indicates that a task must be resident on *a specific processor*, while negative pre-allocation identifies a task that cannot be allocated to that *processor*”. In other words, the original disclosure has not disclosed preallocating tasks in each coupling in the set of couplings to one of the plurality of computing resources when the computing resources are *memory resources* or *communications resources*. Therefore, the specification does not enable any person skilled in the art to which it pertains to use the invention commensurate in scope with these claims. Dependent claims are rejected as being dependent on a rejected claim.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-3, 5-11, and 13-16 are rejected under 35 U.S.C. 101 because the inventions as disclosed in claims are directed to non-statutory subject matter.

9-1. Claims 1-3, 5-11, and 13-16 are directed to determining an allocation of software and data components in a distributed system. This claimed subject matter lacks a practical application of a judicial exception (abstract idea) since it fails to produce a useful, concrete, and tangible result.

As stated in the MPEP 2106 IV, “Likewise, a claim that can be read so broadly as to include statutory and nonstatutory subject matter must be amended to limit the claim to a practical application. In other words, if the specification discloses a practical application of a section 101 judicial exception, but the claim is broader than the disclosure such that it does not require a practical application, then the claim must be rejected.” However, the tangible requirement does require that the claim must recite more than a 35 U.S.C. 101 judicial exception, in that the process claim must set forth a practical application of that judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had “no substantial practical application.”).

Specifically, the claimed subject matter is broader than the disclosure such that it does not require a practical application to produce a useful, concrete, and tangible result. More specifically, the claimed subject matter provides for allocating the defined set of components to computer hardware resources having the computing resources and the computing resources

including at least one of processor resources, memory resources and communications resources. However, when the recited “computing resources” are communications resources, the recited “computer hardware resources having the computing resources” could be, for example, hubs, switches, etc., which when the defined set of components is allocated does not appear to have a practical application providing a useful, concrete, and tangible result.

Recommendations

10. Claim 15 recites the limitation, “the coupling strength of the peripheral is determined” in line 2 of the claim. For clarification purposes, the Examiner suggests that the “the coupling strength of the *peripheral* is determined” be replaced with “the coupling strength of the *peripheral coupling* is determined”.

Applicant's Arguments

11. Applicant argues the following:

11-1. Drawing Objections

(1) “Submitted herewith are formal replacement sheets of drawings for Figures 1-10. No amendments have been made to the drawings.” (page 8, paragraph 3, Amendment)

11-2. Specification Objections

(2) “While Applicant disagrees that the amendment recites new matter, in view of the fact that the operation of the method is described various portions of the specification and in order to expedite prosecution, Applicant has amended Table 6 of the specification.” (Page 8, paragraph 4, Amendment)

11-3. §101 Rejection of the Claims

(3) “Applicant has amended claims 1 and 9 to clarify characteristics of the computing resources and to clarify that the computer hardware resources include the computing resources. In view of the amendments, Applicant respectfully submits that the claims are directed to a particular machine for determining an allocation of software and data components in a distributed system and that the claims provide a useful, concrete and tangible result.” (page 9, paragraph 1, Amendment)

11-4. §112 Rejection of the Claims

(4) “Applicant has amended claims 1 and 9 such that the word "preallocated" has been deleted. ... Additionally, Applicant has amended claim 9 as suggested in the Office Action to replace control partitions with code partitions.” (page 9, paragraph 2, Amendment)

Response to Arguments

12. Applicant’s arguments have been fully considered.

12-1. Applicant’s argument (1) is not persuasive. Applicant asserts that formal replacement sheets of drawings for Figures 1-10 have been submitted. However, none of the submitted formal replacement sheets can be found.

12-2. Applicant’s argument (2) is not persuasive. The amendment to remove the “Timing” row in Table 6 at page 21 of the specification filed on January 27, 2009, does not appear to have support in the original disclosure including the provisional application. Furthermore, Applicant has argued at page 9, paragraph 4, of the amendment filed on November 30, 2005, “Applicant respectfully submits that the timing strength calculation is adequately described in the

specification. As noted on page 21, the various endpoints at the extremes are assigned strengths of 1-10. Thus according to table 6, when the timing is at or near the minimum endpoint, the timing strength is 10. When the timing is at or near the maximum endpoint, the timing strength is 1. Thus Table 6, when read in conjunction with the specification, adequately describes and *enables* pending claims 5-7 and 13-15.” In other words, Applicant’s argument (2) is not persuasive because Applicant specifically denies typographical errors and asserts, “Table 6, when read in conjunction with the specification, adequately describes and enables pending claims 5-7 and 13-15”. **Therefore, removing the “Timing” row in Table 6 not only introduces new matter to the original disclosure but also raises the issue of written description to the claims.**

12-3. Applicant’s argument (3) is not persuasive. The amended subject matter provides for allocating the defined set of components to computer hardware resources having the computing resources and the computing resources including at least one of processor resources, memory resources and communications resources. However, when the recited “computing resources” are communications resources, the recited “computer hardware resources having the computing resources” could be, for example, hubs, switches, etc., which when the defined set of components is allocated does not appear to have a practical application providing a useful, concrete, and tangible result.

12-4. Applicant’s argument (4) is persuasive. The rejections of claims 1-3, 5-11, and 13-16 under 35 U.S.C. 112, second paragraph, in Office Action dated July 9, 2008, have been withdrawn.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Herng-der Day whose telephone number is (571) 272-3777. The Examiner can normally be reached on 9:00 - 17:30.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kamini S. Shah can be reached on (571) 272-2279. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kamini S Shah/
Supervisory Patent Examiner, Art Unit 2128

/Herng-der Day/
Examiner, Art Unit 2128

February 16, 2009